



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
---------------	-------------	----------------------	---------------------

077965,427 10/23/92 SALCUDÉAN

26M270614

CECIL A. ROWLEY
% MACMILLAN BLOEDEL LIMITED
4225 KINCAID STREET
BURNABY, BRITISH COLUMBIA
CANADA V5G 4P5

S UBC53US
EXAMINER

CHANG, V

ART UNIT PAPER NUMBER

2609
DATE MAILED:

06/14/93

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 day(s) from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-18 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-15 are rejected.
5. ☒ Claims 16-18 are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved. ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

BEST AVAILABLE COPY

Art Unit: 2609

1. The drawings are objected to because the drawings are objected to because label 67 as micro controller (see pg. 9, line 34) is not found in Fig. 3. Correction is required.
2. Applicant is required to submit a proposed drawing correction in response to this Office action. However, correction of the noted defect can be deferred until the application is allowed by the examiner.
3. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

4. Claims 1-3, 5 , 7-15 are rejected under 35 U.S.C. § 103 as being unpatentable over Purcell in view of Cadoz et al.

As to claim 1-3 and 5, Purcell teaches a controller which comprises a base (see 10 in Fig. 1), a platform (see 30 in Fig. 1), means for mounting the platform for a range of movement in a plane in each of two perpendicular directions (see column 2 line

Art Unit: 2609

54- column 3 line 47), and a sensor means (see column 3 line 48- column 4 line 3). Purcell does not teach the magnetic force applying means.

However, Cadoz teaches the first magnetic force applying means including a first magnet means and a first cooperating magnetic force generating means (see 14, 20 in Fig. 3 and column 3 line 62- column 4 line 50). Furthermore, Cadoz suggests the force applying means can be modified to simulate the behavior of a joy stick with two degrees of freedom; see column 7 lines 1-9. Thus in such case, it would have been obvious to have included the second magnetic force applying means including a second magnet means and a second cooperating magnetic force generating means in the teaching of Cadoz.

Thus it would have been obvious to have included the magnetic force applying means taught by Cadoz modified in the device of Purcell for the desirable purpose of deriving tactile feedback to the operator.

As to claims 7, 9, 10, 12, 13 and 15, Cadoz as modified meets all the limitations set forth.

As to claims 8, 11 and 14, eventhough Cadoz does not mention the projected area of a filed generated by the magnet means is constant, it is obvious that Cadoz as modified has to make the projected area of the magnetic constant so that the magnetic force generated can be constant.

Art Unit: 2609

5. Claims 4 and 6 are rejected under 35 U.S.C. § 103 as being unpatentable over Purcell in view of Cadoz et al as applied to claim 1, 3, 5 above, and further in view of Yuasa.

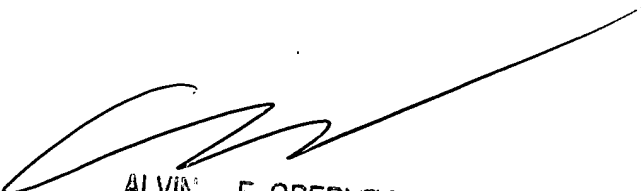
Yuasa teaches a sensor means which comprises a transparent grid (see 8 in Fig 1) and a light source (see 9 in Fig 1) and a detector means (see 10 in Fig 1); see column 2 lines 25-40.

Thus it would have been obvious to substitute the grid means taught by Yuasa in the device of Purcell as modified since it is another well known alternative way to detect the platform movement relative to the base.

6. Claims 16-18 would be allowable if rewritten.

and to include all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication should be directed to Vivian Chang at telephone number (703) 305-4850.


ALVIN E. OBERLEY
SUPERVISORY PATENT EXAMINER
ART UNIT 269

Chang:der
June 03, 1993